

ED 239 073

CE 037 908

AUTHOR Hamel, Cheryl J.; And Others
TITLE Analyses of Recruit Training Practices Related to the Military Performance of Enlisted Navy Women. Technical Note 10-83.
INSTITUTION Naval Training Analysis and Evaluation Group, Orlando, Fla.
REPORT NO TAEG-TN-10-83
PUB DATE Dec 83
NOTE 67p.
PUB TYPE Reports - Research/Technical (143)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Adult Education; *Enlisted Personnel; *Females; Males; *Military Training; *Performance; *Sex Differences; *Sex Fairness; Womens Education
IDENTIFIERS *Navy

ABSTRACT

A study was conducted to identify aspects of the training of male and female Navy recruits at the Recruit Training Command Orlando that might lead to differential military performance. Current data on the military performance of enlisted Navy women recently graduated from recruit training were used to document reports of female-enlisted performance and define suggested problem areas in terms of observable behavior. Problem areas included military appearance, leadership, adaptability, pregnancy and child care, and military customs. Findings of a comparison of recruit training for men and women were that the Navy recruit training curriculum is identical for men and women; the same level of performance is officially required for all recruits; many staff members are unprepared for leading recruits of the opposite sex; and differences in backgrounds of male and female company commanders result in different role models. These recommended changes in recruit training were suggested: a training program for division officers; expanded use of mixed general leadership of companies and divisions; instruction on wearing dress uniforms and grooming for female recruits; and improved technical training on military customs. (A military performance checklist and literature review are appended.) (YLB)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ANALYSES OF RECRUIT TRAINING PRACTICES
RELATED TO THE MILITARY PERFORMANCE
OF ENLISTED NAVY WOMEN

Cheryl J. Hamel
Janet Thompson
D. Robert Copeland
Herschel Hughes, Jr.

Approved by:

Alfred F. Smode
Director

Training Analysis and Evaluation Group
Department of the Navy
Orlando, Florida 32813

ACKNOWLEDGMENTS

The authors are indebted to the Commander Training Command, Atlantic Fleet (COMTRALANT) for assistance in obtaining feedback selected Atlantic fleet and COMTRALANT commands. Appreciation is extended to COMTRALANT Force Master Chief R. G. Johnston, USN, for coordinating visits of Training Analysis and Evaluation Group personnel to fleet and COMTRALANT commands and for assisting in data interpretation.

Appreciation is also expressed to CDR J. E. Kilmer, USN, Head, Women's Programs Section, Office of the Chief of Naval Operations, and LT C. L. Sobe, USN, Women in Ships Coordinator, for providing information about the effectiveness of the Women in Ships program.

The generous assistance of the following commands was instrumental in the completion of this report:

- . Basic Military Training School, Lackland Air Force Base, Texas
- . Fleet Anti-Submarine Warfare Training Center, Atlantic, Norfolk, Virginia
- . Fleet Combat Training Center, Atlantic, Dam Neck, Virginia Beach, Virginia
- . Helicopter Training Squadron ONE, Naval Air Station, Jacksonville, Florida
- . Marine Corps Recruit Depot Parris Island, South Carolina
- . Naval Air Station, Oceana, Virginia Beach, Virginia
- . Naval Air Technical Training Center, Millington, Tennessee
- . Naval Amphibious Base, Little Creek, Norfolk, Virginia
- . Naval Base, Norfolk, Virginia
- . Naval Hospital, Orlando, Florida
- . Naval Station, Norfolk, Virginia
- . Naval Technical Training Center, Meridian, Mississippi
- . Naval Training Center, Orlando, Florida
- . Personnel Support Detachment, Naval Air Station, Norfolk, Virginia
- . Service School Command, Great Lakes, Illinois
- . Recruit Training Command, Orlando, Florida
- . Service School Command, Orlando, Florida
- . U.S. Army Training Center, Fort Jackson, South Carolina
- . USS L. Y. SPEAR (AS-36)
- . USS YELLOWSTONE (AD-41)
- . Naval Education and Training Program Development Center, Pensacola, Florida.

FOREWORD

In 1982, the Training Analysis and Evaluation Group (TAEG) began an analysis of the military performance aspects of recruit training of Navy women. The study was requested by the Commanding Officer (now former commanding officer) of the Recruit Training Command (RTC) Orlando. The Chief of Naval Technical Training and the Chief of Naval Education and Training were kept advised of study efforts.

The TAEG collected data on the military performance of RTC graduates in the fleet and follow-on training as well as data on recruit training practices at RTC Orlando, during 1982 and 1983. Related data about recruit company commander leadership and experience, collected in 1981 for another TAEG study, were also reviewed.

At various times during the course of the present study, TAEG reported the results of the analyses to the Commanding Officer of RTC Orlando and to designated staff personnel. As a result of these reports, and due to ongoing improvement efforts by RTC Orlando, many of the issues raised by TAEG were resolved. In 1983, RTC Orlando experienced a change of command and an acceleration of change, as might be expected. Consequently, many of the recommendations suggested by TAEG in this report have already been implemented in whole or in part.

TABLE OF CONTENTS

| <u>Section</u> | <u>P</u> |
|---|----------|
| FOREWORD..... | 1 |
| I INTRODUCTION..... | 5 |
| Purpose..... | 5 |
| Background..... | 6 |
| Organization of the Report..... | 6 |
| II APPROACH..... | 7 |
| Military Performance Appraisal..... | 7 |
| Methods of Recruit Training Analysis..... | 9 |
| III FINDINGS ON THE MILITARY PERFORMANCE OF ENLISTED WOMEN.... | 11 |
| Enlisted Discharge Rates..... | 11 |
| Advancement to E-4..... | 11 |
| Performance Ratings of Nonrated Personnel..... | 13 |
| Quarterly Reports--Women at Sea Program..... | 14 |
| Staff Interviews..... | 18 |
| Selection of Problem Areas..... | 20 |
| IV ANALYSIS OF RECRUIT TRAINING DIFFERENCES..... | 22 |
| Recruit Performance Evaluations..... | 22 |
| Recruit Performance Records..... | 23 |
| Leadership of Recruits..... | 30 |
| Recruit Training Command/Naval Administrative Command Practices..... | 40 |
| Classroom Instruction/Curriculum..... | 42 |
| Summary..... | 43 |
| V RECOMMENDATIONS..... | 45 |
| REFERENCES..... | 48 |
| APPENDIX A Activities and Commands Reporting on the Military Performance of Enlisted Navy Women..... | 50 |
| APPENDIX B Military Performance Checklist..... | 53 |
| APPENDIX C Women in the Navy Literature Review..... | 56 |

LIST OF TABLES

| <u>Table</u> | | <u>Page</u> |
|--------------|---|-------------|
| 1 | Summary of Enlisted Discharged by Reason, Type Discharge, and Sex for Second Quarter Fiscal Year 1982..... | 12 |
| 2 | Advancement to E-4 for Men and Women in Traditional and Nontraditional Ratings, September 1982 Examination..... | 13 |
| 3 | Navywide Performance Evaluations of Nonrated Personnel, September 1982..... | 14 |
| 4 | Pregnancies/Disciplinary Actions from Quarterly Reports--Women at Sea Program..... | 15 |
| 5 | Quarterly Reports--Women at Sea Program: Evaluation of Enlisted Women..... | 17 |
| 6 | Military Performance Comparisons of Male and Female Recruits..... | 24 |
| 7 | Streetmarks Assigned to Male and Female Recruits..... | 25 |
| 8 | Demerits Assigned to Male and Female Recruits..... | 26 |
| 9 | Number and Reason for Setbacks in Recruit Training for Male and Female Recruits..... | 27 |
| 10 | Comparisons of Military Inspection Scores for Male and Female Companies..... | 28 |
| 11 | Recruit Company Awards (Flags) Awarded to Male and Female Companies, One Training Cycle..... | 29 |
| 12 | Description of Male and Female Company Commanders at Recruit Training Command Orlando..... | 34 |
| 13 | Important Sources of Feedback on their own Performance Cited by Male and Female Company Commanders (CC)..... | 39 |

SECTION I

INTRODUCTION

The number of enlisted women on active duty in the Navy has increased from 6,000 in 1972 to 37,000 in 1982. This represents an increase of over 500 percent in the last decade. Today, 8 out of every 100 of the enlisted force are women and they are serving in selected billets where previously only men were used (Sadler, 1983). Recognizing that women have made a vital contribution to Navy mission accomplishment, the Chief of Naval Operations (CNO) intends to increase the number of women in the Navy to the amount that can be effectively utilized within the constraints of the law. Currently, the goal is 45,000 women on active duty by 1985.

The Navy is committed to the achievement of a fully integrated work force with equal advancement opportunity and equal treatment for men and women.¹ The CNO's Manpower, Training, and Personnel Plan requires the development of the professional competence of all personnel and the full, effective use of that competence to achieve Navy goals.² This requirement can only be met by the sustained application of the finest leadership and management skills and continual examination of training programs.

The Recruit Training Command (RTC) Orlando is responsible for training all newly enlisted women. In 1982, the RTC received feedback from several fleet and follow-on training commands that a "double standard" was perceived to exist in the recruit training of Navy men and women. It was alleged that this double standard resulted in military performance problems among women when they reached the fleet. With knowledge that the Training Analysis and Evaluation Group (TAEG) has an ongoing direction from the Chief of Naval Education and Training to address the optimization of recruit training,³ the Commanding Officer of RTC Orlando requested TAEG to examine recruit training practices that might indicate differences in the training of Navy men and women.⁴

PURPOSE

The purpose of the study was to identify aspects of the training of male and female recruits at the RTC Orlando which might lead to differential military performance in the fleet. The intent was to isolate training practices that could be interpreted as unequal treatment based on sex, and also to isolate practices that were, in the practical sense, "equalized" but producing poor military performance. A goal of the study was to recommend to the RTC changes in the management of recruit training that would help to minimize male-female training differences and enhance female performance.

¹OPNAVINST 5454.3, subj: Navy Affirmative Action Plan; promulgation of.

²OPNAVINST 5310.13, subj: Manpower, Training and Personnel Plan.

³CNET ltr. Code 53 of 6 December 1979.

⁴CO RTC Orlando ltr. Code 50 of 24 March 1982.

BACKGROUND

It is Navy policy that men and women receive the same recruit training program. Currently, all enlistees go through a 7.7-week training cycle and receive instruction from the same curriculum.⁵

At the RTC Orlando there are nine recruit divisions, and two of them are designated for women-only. Each division is composed of a maximum of 12 companies each containing no more than 80 men or women. Recruits are billeted in training companies for control, training, and movement. Except for academic instruction, women recruits train primarily with other women recruits and men with other men.

Company Commanders (CC) customarily are of the same sex as their recruits. Occasionally recruit divisions may have a division officer (DO) or leading chief petty officer (LCPO) of the opposite sex. Thus, recruit training of men and women can be characterized as "separate but equal."

ORGANIZATION OF THE REPORT

In addition to this introduction, the report contains four other sections and three appendices. Section I presents the approach used to discover female military performance problems in various operational and training settings and to analyze the training aspects of military performance in recruit training. Section III presents the results of the analysis of female enlisted performance problems and section IV presents the results of the analysis of military performance in recruit training. Conclusions and recommendations on recruit training are presented in section V.

The appendices elaborate the methodology and provide further information. Appendix A presents a list of all commands and activities visited by TAEG and a list of ships reporting on the Women at Sea Program (reports acquired by TAEG). Appendix B presents the military performance checklist used in staff interviews, and appendix C provides background information in the form of a literature review on women in the Navy.

⁵Curriculum Outline for U.S. Navy Recruit Training, X777-7770, Navy Technical Training Command, September 1983.

SECTION II

APPROACH

This study provides detailed analyses and observations over a considerable range of topics related to female and male military performance differences and identifies underlying bases for these differences.

The study was conducted in two phases. The first phase was designed to document reports of female enlisted performance and to define suggested problem areas in terms of observable behavior. On the basis of the findings, areas of recruit training were selected for analysis. The second phase of the study was the analysis of these selected areas of recruit training to determine if differences in male and female recruit training practices existed and whether the performance problems could be alleviated through changes in these practices.

The procedural steps consisted of:

- acquiring information from published reports on women in the Navy
- collecting recorded data and interview data on the military performance of enlisted women using men as the comparison group
- collecting data on the performance of male and female recruits during recruit training at the RTC Orlando
- observing leadership and training practices at the RTC Orlando
- relating findings on women's military performance to recruit training procedures and the total Navy environment
- recommending revisions of recruit training procedures.

MILITARY PERFORMANCE APPRAISAL

Data were collected on the military performance of enlisted men and women with the focus on women in the lower rates. The purpose was to obtain a broad view of women's military performance after recruit training using a variety of sources. The data included: (1) published or recorded statistics on Navy enlisted military performance, (2) reports from sea-going commands in the Women at Sea Program, (3) staff interviews, and (4) a review of published research on women in the Navy. Each of these sources is described in detail below.

PERFORMANCE STATISTICS. A variety of sources were used to obtain recent recorded data pertaining to enlisted military performance after recruit training. The data included:

scores on the September 1982 E-4 advancement-in-rate examinations and advancement statistics obtained from the Naval Education and Training Program Development Center (NAVEDTRAPRODEVEN)

averages of supervisor scores of nonrated personnel on professional performance, military behavior, leadership potential, military appearance, and adaptability to military life obtained from the examination answer sheets at the NAVEDTRAPRODEVEN

enlisted discharge rates for the second quarter of fiscal year 1982 from the Naval Military Personnel Command.

QUARTERLY REPORTS--WOMEN AT SEA PROGRAM. Quarterly reports from commands which had recently utilized women for the first time were requested from the office of the Women at Sea Program. The CNO requirement is that the reports contain information regarding: (1) assignment and integration of women, (2) performance compared to men, especially in areas of leadership and ability, (3) morale, (4) Temporary Additional Duty (TAD), (5) administration, including instances of discipline problems and unplanned losses, and (6) the impact of integration on operational readiness and the successes and problems of the program.⁶

Eleven recent reports from nine commands (6 Atlantic and 3 Pacific) were obtained. The reports were from 4 ADs, 3 ASs, and 2 ARs with a total of 908 female enlisted. Appendix A contains the list of the commands which submitted reports used in the analyses. The reports were analyzed for pregnancy rates, disciplinary actions, and positive and negative comments concerning the success of integration.

STAFF INTERVIEWS. Perceptions of Navy women's military performance in 1982 were obtained from interviews conducted with 133 officers and petty officers at various training schools and fleet commands throughout the eastern United States.⁷ The activities visited are listed in appendix A, together with the number of personnel interviewed at each.

Whenever possible, a semistructured, formal interview procedure was used. The procedure centered around a 26-item Military Performance Checklist (appendix B). The checklist of behaviors related to military conduct and military appearance was derived from recruit training curriculum materials and published TAEG reports related to recruit training (Copeland, Henry, Mew, and Cordell, 1976; Copeland, Henry, and Mew, 1978).

Staff members were asked to evaluate the performance of female subordinates in general, using the performance of Navy men as the standard for comparison. The interviewer guided them through the checklist items and conducted open-ended discussion of those items which were pointed out as problem areas.

REVIEW OF PUBLISHED REPORTS. Published technical reports were examined for data related to the military performance and training of enlisted Navy women. Due to the subject matter of the bulk of the published studies, the review focused on male attitudes toward women in the Navy and women's attitudes toward their Navy experiences. The literature review is presented in appendix C.

⁶OPNAVNOTE 1300, subj: Women in Ships monitoring program, 28 July 1982.

⁷During the course of associations with recruit training over the past 5 years, TAEG has also discussed women's issues with Navy staff on the West Coast.

METHODS OF RECRUIT TRAINING ANALYSIS

Selected areas of recruit training were analyzed at the RTC Orlando in 1982-83 to discover whether differences exist in the training of male and female recruits that could lead to differences in military performance. The various analyses included: (1) interviews of RTC staff, (2) examination of recruit performance records, (3) onsite observations of recruit training and performance, (4) analysis of leadership practices at the RTC. Each analysis is described in detail below.

RTC STAFF INTERVIEWS. Thirteen staff members of the RTC Orlando--seven female and six male officer and enlisted personnel in the Technical Training Department and the Military Training Department--were interviewed. Respondents included two classroom instructors, two Military Inspectors, four Division Officers, three Leading Chief Petty Officers, the Director of the Technical Training Department, and the Assistant Military Training Officer. All staff members who were interviewed had contacts with both male and female recruits. The seven enlisted personnel in the group were all experienced CCs.

The staff members were asked to use the Military Performance Checklist to evaluate the performance of male and female recruits. The interview also included open-ended questions about their own job performance at the RTC and the job performance of others on the RTC staff.

RECRUIT PERFORMANCE RECORDS. Recruit Personnel Data Records ("hardcards") and records from the Military Inspections Department (MID) were obtained from the RTC Orlando to compare male and female performance during recruit training.

A total of 746 recruit "hardcards" from five male and five female companies provided comparisons of academic test failures, motivational training (MOTOUR) assignments, streetmarks, demerits, training setbacks. Companies were matched for time of year in training (32) to provide comparisons of male and female recruits trained under similar conditions and by the same chain of command.

The MID company records provided summaries of the performance of 14 training groups containing 55 male and 33 female companies. The 10 companies used in the "hardcard" analyses were a part of these training groups. The records contained company scores for personnel, infantry, barracks and locker inspections, and company flag awards for overall academic performance, inspections, and physical fitness performance.

ONSITE OBSERVATIONS. Analysis of recruit training required numerous on-site observations. A female recruit company was "shadowed" for one day. Compartments were visited during CC instruction times. Female uniform fittings were observed at the Recruit In-Processing Facility and later in the compartments. Classroom lectures on topics pertaining to military performance were evaluated. Drill and ceremony behavior was observed at recruit graduation, and military inspections were observed in the compartments.

ANALYSIS OF RTC LEADERSHIP. Analysis of recruit training included an examination of RTC leadership and RTC practices. Methods of data collection included the following:

- The 13 RTC staff members who evaluated recruits using the Military Performance Checklist were also interviewed about their leadership styles with male and female recruits. They were further queried about their views of the impact of RTC practices on recruit performance differences.

- Leadership styles of male and female company commanders (CCs) were analyzed by examining the "hardcards." Differences in the assignment of demerits and other disciplinary and motivational techniques were noted.

- Data on CCs collected through an earlier TAEG effort (Hughes, Copeland, Ford, and Heidt, 1983) were reexamined. The data included descriptions of the Navy experience and supervisory experience of male and female CCs and results from a questionnaire designed to examine leadership differences at RTC Orlando in 1981.

- Numerous unstructured observations of the appearance and behavior of the RTC staff were conducted during frequent visits to RTC offices and training sites.

SECTION III

FINDINGS ON THE MILITARY PERFORMANCE OF ENLISTED WOMEN

Current data on the military performance of enlisted Navy women recently graduated from recruit training are contained in this section. Performance scores and discharge rates obtained from official Navy records, performance statistics obtained from reports monitoring the Women at Sea Program, and evaluations of military performance obtained from staff interviews are presented.

ENLISTED DISCHARGE RATES

Table 1 presents Navywide demographic data prepared by the Naval Military Personnel Command concerning discharge rates of enlisted personnel for the second quarter of fiscal year 1982. The table indicates for men and women the reasons for discharge, the types of discharge, and the total numbers discharged.

The number of enlisted women discharged was 9.5 percent of the total number of discharges. Women comprised 8.4 percent of all enlisted personnel.

Men and women had different reasons for discharge ($\chi^2 = 2287.97$, $df = 8$, $p < .01$). The greatest variation was in the Convenience of Government category (Minority/Dependency/Hardship/Pregnancy/Parenthood). Female enlisted discharges were 81 percent of the total number in that category.

Men and women also differed significantly in the type of discharge they received ($\chi^2 = 583.33$, $df = 4$, $p < .01$). Eighty-six percent of female enlisted discharges were Honorable (1,208 of 1,400) compared to 53 percent (7,010 of 13,270) of male enlisted discharges.

The data indicate that, in comparison to men, enlisted women were less often discharged for reasons involving serious offenses or misconduct and more often given a type of discharge (Honorable, General) which indicated meritorious or satisfactory service to the established standards of the Navy.

ADVANCEMENT TO E-4

Advancement statistics for all men and women who took the E-4 examinations in September 1982 are presented in table 2. The table indicates that, over all ratings, proportionally fewer women than men were advanced to E-4. The discrepancy is largely due to the concentration of women in 19 ratings traditional for women. These ratings are administrative, medical, and dental and are, for the most part, overmanned. The 70 percent of the women in the sample who took the examination for these ratings showed 65.5 percent advanced compared to 70.9 percent for men.

TABLE 1. SUMMARY OF ENLISTED DISCHARGED BY REASON, TYPE DISCHARGE AND SEX FOR SECOND QUARTER FISCAL YEAR 1982

| Reason/Type Discharge | Male | Female | Total |
|---|--------|--------|--------|
| <u>Security</u> | | | |
| Other Than Honorable | 1 | 0 | 1 |
| Total | 1 | 0 | 1 |
| <u>Misconduct</u> | | | |
| Honorable | 87 | 5 | 92 |
| General | 804 | 19 | 823 |
| Other than Honorable | 809 | 9 | 818 |
| Total | 1,700 | 33 | 1,733 |
| <u>Homosexual</u> | | | |
| Honorable | 144 | 27 | 171 |
| General | 47 | 4 | 51 |
| Other than Honorable | 9 | 0 | 9 |
| Total | 200 | 31 | 231 |
| <u>Unsuitability</u> | | | |
| Honorable | 486 | 133 | 619 |
| General | 277 | 26 | 303 |
| Total | 763 | 159 | 922 |
| <u>Convenience of Government</u> <u>(Unfavorable)</u> | | | |
| Honorable | 1,877 | 90 | 1,967 |
| General | 2,999 | 88 | 3,087 |
| Other than Honorable | 276 | 11 | 287 |
| Total | 5,152 | 189 | 5,341 |
| <u>Convenience of Government</u> <u>(Favorable)</u> | | | |
| Honorable | 4,094 | 702 | 4,796 |
| General | 360 | 26 | 386 |
| Total | 4,454 | 728 | 5,182 |
| <u>Convenience of Government</u> <u>(Minority/Dependency/Hardship/</u> <u>Pregnancy/Parenthood)</u> | | | |
| Honorable | 50 | 227 | 277 |
| General | 4 | 5 | 9 |
| Total | 54 | 232 | 286 |
| <u>Convenience of Government</u> <u>(Physical Disability)</u> | | | |
| Honorable | 272 | 24 | 296 |
| General | 38 | 0 | 38 |
| Total | 310 | 24 | 334 |
| <u>Judicial (Courts-Martial)</u> | | | |
| Bad Conduct | 634 | | 638 |
| Dishonorable | 2 | | 2 |
| Total | 636 | 4 | 640 |
| <u>Summarized Total</u> | | | |
| Honorable | 7,010 | 1,208 | 8,218 |
| General | 4,529 | 168 | 4,697 |
| Other Than Honorable | 1,095 | 20 | 1,115 |
| Bad Conduct | 634 | 4 | 638 |
| Dishonorable | 2 | 0 | 2 |
| FINAL TOTAL | 13,270 | 1,400 | 14,670 |

SOURCE: MARMIS 1910-2225 of 31 Mar 1982, Naval Military Personnel Command; N-6101.

The far smaller group of women whose examinations were distributed in 52 nontraditional ratings, many of which require sea duty and/or are undermanned, fared much better. Their percent advancement was 78.1 compared to 82.8 percent for men.

TABLE 2. ADVANCEMENT TO E-4 FOR MEN AND WOMEN IN TRADITIONAL AND NONTRADITIONAL RATINGS, SEPTEMBER 1982 EXAMINATION

| Rating Category | Number Tested | | Percent Advanced | |
|-----------------|---------------|-------|------------------|-------|
| | Men | Women | Men | Women |
| Traditional | 7,056 | 3,023 | 70.9 | 65.5 |
| Nontraditional | 19,317 | 1,270 | 82.8 | 78.1 |
| All Ratings | 26,373 | 4,293 | 79.6 | 69.2 |

Consistent with the advancement data, when all ratings were combined, the difference between men's and women's examination scores was statistically significant. The mean examination standard score for women was 47.9 compared to 49.9 for men.

However, individual advancement in rate depends on more than simply the examination score. Other determining factors include the performance evaluation score (PK), time in rate, and time in service. The performance evaluation score for E-4 is primarily an indication of general military performance level rather than job skill level. Comparison of male and female PK scores was especially pertinent to the topic of this study, and for this reason, the results are presented separately below.

PERFORMANCE RATINGS OF NONRATED PERSONNEL

The averages of five performance ratings made by immediate supervisors were examined for all men and women who took the E-4 examinations in September 1982. The scores analyzed were averages of separate scores for five areas--professional performance, military behavior, leadership potential, military appearance and adaptability to military life. The separate scores were not available. Performance averages ranged from 3.0 to 4.0.

Table 3 presents performance data for each sex. The mean performance average of 3.68 for women was significantly higher than the men's mean of 3.58, and proportionally more women than men had perfect scores on their performance evaluations.

TABLE 3. NAVYWIDE PERFORMANCE EVALUATIONS OF
NONRATED PERSONNEL, SEPTEMBER 1982

| | Men (n=26,528) | Women (n=4,322) | t-Value |
|-------------------------------------|-------------------|--------------------|---------|
| Performance Evaluation Mean | 3.58 (sd=.21) | 3.68 (sd=.19) | 2.88* |
| Percent With Perfect Score (4.0) | 1.8% | 4.8% | 12.44* |

*Significant difference, $p < .01$.

QUARTERLY REPORTS--WOMEN AT SEA PROGRAM

Eleven quarterly reports from nine commands in the Women at Sea Program were analyzed. Information relevant to the performance of enlisted women is summarized in tables 4 and 5.

Table 4 shows the number of enlisted women from each command and presents data pertaining to pregnancy and disciplinary actions.

According to OPNAVNOTE 1300 (1982) the commanding officers (COs) were not required to report pregnancy statistics; however, they often did so to add weight to their arguments concerning the negative impact of pregnancy/Navy pregnancy policy on operational readiness. Seven of the 11 reports (6 commands of 9) included data on pregnancy, often as part of their unplanned loss statistics. Pregnancy rates based on quarterly statistics ranged from 2.0 percent (3 of 151 women) to 11.6 percent (23 of 199 women). In comparison, the Navywide pregnancy rate is frequently reported at 8-12 percent (Hoiberg, 1979) and the nationwide pregnancy rate for women aged 20-24 is 11.5 percent (Olson and Stumpf, 1978).

In compliance with the requirement to report administrative actions involving women, numbers of female disciplinary problems were reported by 8 of the 9 commands. Since statistics on the number of men on board were not reported, percent disciplinary actions for men and women in most cases could not be compared. Only two commands reported comparative statistics or made comparative statements. One CO reported that 4.3 percent of the women were awarded nonjudicial punishment compared to 5.6 percent of the men. Another CO reported that, "comparatively, there were fewer disciplinary problems with female crewmembers."

Women's Uniform Code of Military Justice (UCMJ) violations that were specifically mentioned were:

- Absence Without Leave (Article 86)
- Insubordinate Conduct (Article 91)
- Failure to Obey Orders (Article 92)
- Assault (Article 28)
- General (Article 134).

TABLE 4. PREGNANCIES/DISCIPLINARY ACTIONS FROM QUARTERLY REPORTS--WOMEN AT SEA PROGRAM

| Command | Number of Enlisted Women Aboard | Number of Instances for Quarter | |
|---------|---------------------------------|---------------------------------|----------------------|
| | | Pregnancies | Disciplinary Actions |
| 1 | 58 | 3 | 2 |
| 2 | 66 | 2 | 1 |
| 3 | 92 | 3 | 4 |
| 4 | 128 | * | 0 |
| 5 | 191** 175 | 23 * | 11 7 |
| 6 | 95 | * | * |
| 7 | 144** 132 | 3 10 | 8 6 |
| 8 | 93 | * | 3 |
| 9 | 41 | 1 | 0 |

*Not reported.

**Two quarters reported.

Table 5 summarizes evaluative comments about enlisted women taken from the 11 quarterly reports. By far, the impact of unplanned losses due to pregnancy was the major concern. The COs were required to report the impact of the integration of women on operational readiness, and pregnancy was reported seven times as a problem in that context. Current Navy policy states that a pregnant woman be reassigned to shore duty as soon as practicable when the pregnancy is confirmed. This results in an unfilled billet, often for several months, until a replacement can be found. In contrast, pregnant women at shore activities who request discharge must give 4 months notice in order to provide time to find a replacement (NAVPERS 15560, Article 3810170, 1983).

Other comments were less frequent. Three commands commented on berthing. Two needed additional berthing as more women reported aboard, and one had extra berthing for women. One command stated that single parents were more often women than men and that there were instances when these women asked for Temporary Duty--Humanitarian Assignment (TD HUMS) during periods of ship deployment. Another command commented that although women were 12.5 percent of the crew they made up 27 percent of daily sick call during a quarter period.

Two commands made negative comments about the enlisted women's job performance. One command commented that "obvious physical differences," which precluded women from some heavy physical work, was the only difference between capabilities of the men and women. To further amplify this last comment, from those words and others in the report, it could be inferred that the women were not being assigned to heavy industrial equipment because it was assumed they could not handle it. Another command reported that 30 percent of enlisted women below E-4 were poor performers, but the report did not elaborate. And, finally, regarding military performance (the focus of the TAEG study) only one command reported that women's performance was poor, and that command mentioned further that the women's military performance had steadily improved from when they first reported aboard.

The 15 negative comments outlined above were balanced by 16 positive comments contained in the reports. Seven of nine commands reported that the women's capabilities were comparable to their male counterparts and in some cases were superior. Four of the nine commented that the women's enthusiasm and/or desire to be accepted resulted in their productivity being equal to or greater than the men's. Five of the nine commands commented that the women's leadership abilities were comparable to the men's and/or that they accepted leadership responsibilities enthusiastically.

TABLE 5. QUARTERLY REPORTS--WOMEN AT SEA PROGRAM:
EVALUATION OF ENLISTED WOMEN

| Category | Number of Comments* |
|-----------------------------|------------------------|
| <u>Problem or Concern</u> | |
| Pregnancy/Unplanned Losses | 7 |
| Berthing Needs | 3 |
| Military Performance | 1 |
| Single Parenthood | 1 |
| Rate of Sick Call | 1 |
| Job Performance | 2 |
| <u>Favorable Evaluation</u> | |
| Productivity | 4 |
| Capabilities | 7 |
| Leadership | 5 |

*Based on 11 reports from 9 commands.

STAFF INTERVIEWS

The interviews showed that there were staff members at all levels of the chain of command who felt that both enlisted men and women needed to improve their performance in many of the areas suggested by the Military Performance Checklist. To satisfy the requirements of the interview, respondents focused their comments on problems among enlisted women. Respondents attempted to state general problem areas as they specifically applied to women or they noted problem areas where women were showing performance inferior to men's.

There was little agreement among the respondents on what were typical female performance problems. There were no instances where an item on the checklist was judged as a problem area by a majority of respondents. With the lack of a statistical basis for determining problem areas, criteria were developed to determine which performance areas deserved consideration by the RTC Orlando. Performance areas were listed as problem areas if all of the following criteria were met:

- The item elicited only negative comments about women's performance and no favorable comments.
- Relative to all the items on the checklist, the item received more than the average number of negative comments.
- An item elicited the same negative comments from multiple sources--ships, shore-based operational units, and training activities.

PROBLEM AREAS.

Military Appearance. Respondents agreed that women's uniforms usually looked neat and well-cared for; however, they also agreed that uniforms were being worn improperly because of the male supervisors' admitted lack of knowledge concerning female uniform regulations and the more complex uniform requirements for women. It was suggested by some respondents that enlisted women's uniforms could be better tailored.

Respondents also generally agreed that most women had good grooming and personal hygiene practices, but once again male supervisors stated they did not thoroughly know grooming regulations for women. Long hair not put up neatly was a grooming problem specifically mentioned.

Leadership. For the recent graduate of recruit training, opportunities to assume leadership positions are limited. The sailor is learning technical skills, and skills in leadership and initiative are rarely practiced in the E-2/E-3 ratings.

Respondents noted that there were fewer women in leadership positions than men. Their comments reflected limited opportunity to practice leadership in the lower rates as well as the special problems the women in the higher rates were experiencing.

Comments were that the women were not eager to assume leadership positions until they had more experience on the job, they "held back," and they were more team-oriented and interested in getting technical skills. There were problems when men gave female leaders less respect, when female leaders did not demand respect for their rank, and when women did not want to take charge and supervisors did not demand it of them.

Adaptability. Respondents from the ships, the operational shore-based activities, and the training activities stated that women were less able than men to adapt to the hardships and sacrifices demanded by Navy life. In the fleet, incidences were reported where women were less willing to put in overtime and looked for ways to stay ashore when the ship was ready to deploy. The reasons were usually related to child care responsibilities. There were also reports that women had a more difficult time living in the ship's quarters and did not handle separation from spouses as well as men.

Pregnancy and Child Care. Of great concern to officers and enlisted supervisors was the impact of pregnancy on Navy work productivity and deployment. On the ships, comments were that pregnancy created unplanned losses. At other commands, comments were that pregnant women who stayed at their assignments were absent from their jobs before and after delivery.

Some respondents reported high rates of pregnancy among enlisted women. Others felt that women were using pregnancy to obtain an honorable discharge from the Navy.

Some respondents also noted that instances of tardiness and absences due to child care responsibilities were higher among enlisted women than men.

Military Customs. Performance problems among enlisted women in this area were more often reported by commanders and staff higher in the chain of command than by first line supervisors. Flag officers and commanding officers more often saw enlisted in their dress uniforms (full dress or service dress) and more frequently observed saluting and other military customs than did work center supervisors.

Officers and senior enlisted personnel reported that there were both male and female enlisted who avoided situations requiring a salute, did not correctly recognize rank and rate, and did not understand the purpose or structure of the chain of command. They also reported that there were recent recruit graduates of both sexes who did not use correct shipboarding procedures and did not utilize Navy terminology. Some respondents said they saw specific problems involving military customs more often among women than men. Failure to add "Sir/Ma'am" when addressing an officer and not saluting properly were two specific problems that they more often noticed among women. Another problem seen more frequently among women was improper use of the chain of command. Officers reported that some women who understood how to use the chain of command nevertheless went over the heads of first line supervisors when they felt these supervisors were unresponsive to their

needs. Often these women went to a senior female petty officer to get help or advice. This behavior was likely to be condoned and encouraged by male supervisors who felt uncomfortable dealing with female subordinates.

SELECTION OF PROBLEM AREAS

Recorded performance data show satisfactory military performance for Navy enlisted women in the lower rates. The data indicate that women require fewer disciplinary actions than men, and that their performance ratings on the average are equal to or better than men's. In contrast, commanders, staff, and senior enlisted supervisors perceive problem areas in the military performance of enlisted women which they feel should be addressed in recruit training.

Controlled observational checks were not conducted by TAEG to validate staff perceptions. To what degree these reports of women's performance problems were based in reality or were a function of perceptual bias was unimportant for the purpose of this study. The problem areas documented in this report clarified some generalized complaints about women's performance in the Navy and directed the examination of recruit training practices as applied to men and women.

Problem areas in women's military performance most likely influenced by recruit training were selected from the larger body of reported problems and are listed below.⁸

- . wearing the uniform incorrectly
- . poor grooming habits
- . adapting to life aboard ship
- . improperly addressing an officer
- . improper hand saluting
- . not using the chain of command.

Reported problem areas of women which are not specifically military performance problems but potentially related to recruit training are:

- . pregnancy
- . child care.⁹

The nature of the pregnancy problem is directly related to Navy policy (NAVPERS 15560, Article 3620220, 1983). In 1982, the Navy revised its policy on pregnancy making it more difficult for pregnant women to obtain discharges. Under the new policy, women may be denied discharge if retention is determined to be "in the best interest of the service." This

⁸Many of these problems were attributed to male recruit graduates in an earlier study (Copeland, Henry, Mew, and Cordell, 1976).

⁹The recruit training curriculum currently addresses pregnancy and child care issues indirectly through instruction in birth control.

policy change will increase the number of pregnant women on active duty which might have an impact on the work group. It will also decrease the attrition rate for women, probably resulting in attrition rates lower than men's, and it will probably increase lost time by female enlisted due to pregnancy-related absences. Current figures indicate that the average female lost time per year is lower than male lost time due to the greater number of unauthorized absences and desertions among men (Thomas, Monda, Mills, and Mathes, 1982).

To put the child care problem in the proper perspective, only five percent of women in the Navy are single parents and there are twice as many male single parents (Sadler, 1983).

Other military performance areas mentioned as problems among both enlisted men and women, and likely to be influenced by recruit training are:

- knowing how to salute but avoiding situations where saluting is demanded
- failure to recognize rank/rate
- not using the chain of command because of lack of understanding
- improper shipboarding procedures
- not using Navy terminology.

SECTION IV

ANALYSIS OF RECRUIT TRAINING DIFFERENCES

This section describes the results of the comparisons of recruit training for men and women at the RTC Orlando. Data on both recruit performance and training/leadership related to that performance were analyzed. Two types of data on the performance of male and female recruits are presented:

- recruit performance evaluations from staff interviews
- recruit performance records.

Observations of current leadership and training practices at RTC Orlando are presented under three major topics:

- leadership of recruits
- Recruit Training Command/Naval Administrative Command (NAC) practices
- classroom instruction/curriculum.

RECRUIT PERFORMANCE EVALUATIONS

Thirteen interviews were conducted at RTC Orlando to obtain overall evaluations of male and female recruit performance for comparison with school and fleet interview data.

From the 26 items on the Military Performance Checklist (appendix B), a majority of respondents stated that male and female recruits performed differently in five areas: strong points in military performance for female recruits were wear and care of uniform, attention to detail, and proper military bearing, but a majority of respondents (8 of 13) agreed that the performance of the females was below that of the males in two areas--use of Navy terminology and adaptability to Navy life.

Respondents commented that female recruits had more difficulty in adapting to Navy life because they had a more difficult time dealing with interpersonal relationships, had more home problems, and had greater difficulty adjusting to separation from family. Interviews included comments that male recruits had better emotional control and accepted regimentation more easily.

On the subject of Navy terminology, respondents commented that male recruits liked the terminology, were more inclined than female recruits to use the terms, and were more familiar with the terms because of their greater interest in books and movies using Navy terminology. They also mentioned that male CCs probably used the terms more consistently than the female CCs. However, they felt that by the end of recruit training women recruits had learned the terms to the same level of proficiency as the men.

RECRUIT PERFORMANCE RECORDS

Male and female recruit performance measures derived from Recruit Personnel Data Records ("hardcards") provided measures of the performance of individual recruits. The data derived from Military Inspections Department records provided measures of company performance.

HARDCARD COMPARISONS. Data compiled from the personnel records of individual recruits for five male and five female companies are summarized in table 6. The data indicate that male recruits had a higher incidence of academic test failures ($t = 2.98$, $df = 744$, $p < .01$) and female recruits had a higher proportion of medical chits ($t = 3.50$, $df = 744$, $p < .01$). There were no differences in number of setbacks in training, MOTOUR assignments, streetmarks, or lateral transfers. Number of recommendations for advancement or "A" School and marks for meritorious behavior also showed no differences. However, a significantly greater number of male recruits had "clean hardcards"; i.e., no demerits ($t = 7.33$, $df = 744$, $p < .01$).

The same hardcards were analyzed in detail to discover types of infractions leading to the assignment of streetmarks, demerits or setbacks for male and female recruits. These analyses are shown in tables 7 through 9.

Table 7 describes the assignment of streetmarks. There were no significant differences in the proportions of male and female recruits assigned streetmarks for various kinds of infractions ($\chi^2 = 2.67$, $df = 5$).

Table 8 describes the assignment of demerits. Female recruits had twice as many infractions for which they were given demerits as did male recruits.

A Chi-square analysis indicates significant differences for various categories of infractions ($\chi^2 = 84.1$, $df = 2$, $p < .01$). Females received more demerits than males for failing inspections. Males received more demerits than females for not meeting military requirements and other categories.

The number of demerits given to a recruit for a particular infraction can range from one to five. Men more often received more than one demerit for an infraction than did women.

Table 9 shows the number of setbacks in training from the sample of 386 men and 360 women, and the reasons for the setbacks. More than one-third of all setbacks received by women (13 of 36) were for failure to meet military standards. This proportion was significantly greater than the proportion of male setbacks in this category ($t = 3.70$, $df = 89$, $p < .01$). No other categories showed significant differences between the sexes, although there was a trend in the data showing that many male recruit setbacks were related to academic problems.

TABLE 6. MILITARY PERFORMANCE COMPARISONS OF MALE AND FEMALE RECRUITS

| Mean | Males (n=386) | Females (n=360) |
|---|------------------|--------------------|
| Number of Failures on Academic Tests | 77 | 44* |
| Number of Recruits Receiving No Demerits | 49 | 1* |
| Lateral Transfers | 1 | 1 |
| Motivational Training (MOTOURL) Assignments | | |
| Full-Tour | 4 | 2 |
| Mini-Tour | 6 | 12 |
| Medical Chits | 13 | 31* |
| Recommended: | | |
| Meritorious Advancement to E-2 | 6 | 9 |
| To "A" School | 0 | 2 |
| Marks for Meritorious Behavior | 2 | 10 |
| Number of Streetmarks | 59 | 45 |
| Setbacks in Training | 55 | 36 |

*Significant difference, $p < .01$.

TABLE 7. STREETMARKS ASSIGNED TO MALE AND FEMALE RECRUITS

| Infraction | Number of Streetmarks | |
|--|-----------------------|--------------------|
| | Males (n=386) | Females (n=360) |
| Unmilitary Bearing | 9 | 8 |
| Failure to Double Time | 8 | 5 |
| Improper Detail Formation | 12 | 4 |
| Talking (chowline, galley, street, in ranks, profane language) | 11 | 9 |
| Failure to Follow Instructions | 10 | 9 |
| Other: Improper Uniform, Skylarking, Disrespect to Chief Petty Officer, Fraternization | 9 | 10 |
| Total Number of Streetmarks | 59 | 45 |

TABLE 8. DEMERITS ASSIGNED TO MALE AND FEMALE RECRUITS*

| Type of Infraction | Number of Infractions | Number of Demerits Assigned |
|-----------------------------------|--------------------------|--------------------------------|
| Failing Inspections | | |
| Men | 878 | 1,155 |
| Women | 1,729 | 1,984 |
| Not Meeting Military Requirements | | |
| Men | 103 | 143 |
| Women | 62 | 86 |
| Discipline in Ranks | | |
| Men | 37 | 52 |
| Women | 31 | 48 |
| Disrespect to Staff | | |
| Men | 15 | 24 |
| Women | 4 | 5 |
| Other | | |
| Men | 9 | 13 |
| Women | 10 | 25 |
| Total | | |
| Men | 1,042 | 1,387 |
| Women | 1,836 | 2,148 |

*Males = 386, Females = 360.

TABLE 9. NUMBER OF AND REASON FOR SETBACKS IN RECRUIT TRAINING FOR MALE AND FEMALE RECRUITS

| Reason for Setback | Males (n=386) | Females (n=380) |
|---|------------------|--------------------|
| Failure to Meet Military Standards | 4 | 13* |
| Assigned to Academic Remedial Training | 24 | 11 |
| Failure to Meet Physical Training Standards | 11 | 8 |
| Failure to Meet Academic Standards | 9 | 1 |
| Legal Hold | 1 | 1 |
| Unauthorized Absence | 2 | 1 |
| Assigned Military Indoctrination | 0 | 1 |
| Emergency Leave | 3 | 0 |
| Fraternization | 1 | 0 |
| Total Number of Setbacks | 55 | 36 |

*Significant difference, $p < .01$.

COMPANY RECORDS. Records of the Military Inspections Department of RTC Orlando were examined to determine what, if any, performance differences between male and female companies could be determined. The records of 55 male recruit companies and 33 female recruit companies combined in 14 training groups were analyzed. Training groups were composed of both male and female companies. Table 10 summarizes the type of inspection, the competitive period, and the inspection mean scores. Inspections are scored on a scale of 0-4. The comparison of mean scores showed few differences between male and female inspection performance. Women's inspection scores were significantly higher than men's scores for locker and infantry in the second competitive period ($t = 2.58$, $p < .01$), and no other differences were significant.

TABLE 10. COMPARISON OF MILITARY INSPECTION SCORES FOR MALE AND FEMALE COMPANIES

| Day of Training | Type of Inspection | MEAN SCORES | |
|---------------------------|--------------------|----------------|------------------|
| | | Male (n=55) | Female (n=33) |
| First Competitive Period | | | |
| | Personnel | 3.690 | 3.757 |
| | Infantry | 3.304 | 3.367 |
| | Barracks | 3.642 | 3.619 |
| | Lockers | 3.237 | 3.182 |
| Second Competitive Period | | | |
| | Personnel | 3.815 | 3.838 |
| | Infantry | 3.470 | 3.579* |
| | Barracks | 3.744 | 3.790 |
| | Locker | 3.616 | 3.754* |
| End of Training | Overall | 3.57 | 3.59 |

n = Number of recruit training companies.

* = Significant difference between male and female companies, $p < .01$.

Table 11 compares the number of flags awarded to male and female companies in the same training groups. The number of White Flag, Torch Flag, and Academic Flag awards during the training cycle are reported.

TABLE 11. RECRUIT COMPANY AWARDS (FLAGS) AWARDED TO MALE AND FEMALE COMPANIES, ONE TRAINING CYCLE

| Award | Company Gender | Number of Companies | Number of Awards |
|--|----------------|---------------------|------------------|
| Commanding Officer's Award for Excellence (White Flag) | Male | 55 | 9 |
| | Female | 33 | 4 |
| Physical Fitness Achievement Award (Torch Flag) | Male | 29 | 25 |
| | Female | 17 | 13 |
| Academic Flags (One for each of three periods) | Male | 29 | 28 |
| | Female | 17 | 7 |

The Commanding Officer's Award for Excellence (White Flag) goes to the company in each training group with the highest overall score above 3.75 in personnel inspection, barracks inspection, infantry drill, and physical training at the end of the training cycle. Of the 14 training groups, White Flags were awarded to nine male and four female companies. One training group did not receive a White Flag. Female companies comprised 37.5 percent of the sample and received 30.8 percent of the White Flags. A Chi-Square test showed that the proportion of White Flags received by female companies was not significantly different from what would be expected, given their representation in the sample.

Records of 7 of the 14 training groups analyzed above contained data related to Torch Flag and Academic Flag awards. The Physical Fitness Achievement Award (Torch Flag) goes to all companies in a training group with the minimum qualifying score. Of 29 male companies, 25 (86.2 percent) received Torch Flags; of 17 female companies, 13 (76.5 percent) received the award. This difference was not significant according to a Chi-Square analysis.

All companies in a training group are eligible for three Academic Flags, one for each academic period of the training cycle, if they have the minimum qualifying scores. The 29 male companies in the sample received 28 of a possible 87 Academic Flags (32.2 percent) and the 17 female companies received seven of a possible 52 Academic Flags (13.7 percent). The female companies received proportionately fewer Academic Flags than their male counterparts and this difference is significant ($\chi^2 = 5.79$, $df = 1$, $p < .05$). The number of flags received in the first academic period accounted for most of the male-female difference. The 17 female companies received four flags compared to 20 for the 29 male companies. The first academic performance test covers the topics most closely related to military performance: Hand Salute (3.5), Enlisted Rate Recognition (3.4), Officer Rank Recognition (3.3), Navy History and Traditions (2.4), Ship Organization and Structure (2.6).

Records of the seven training groups used in the above analyses also showed which companies received the Competitive Sports Achievement Award (Cheerio Flag). The award goes to the top male and top female company in each training group based on points accumulated during sports competition. Thus, male and female companies were not in competition with each other for this award and an equal number of flags were awarded to each sex.

In summary, recruit records revealed few noticeable differences between male and female performance in recruit training.

- Men had more academic test failures and academic setbacks early in recruit training, but they received more academic flag awards by the end of the training cycle.
- Women had more setbacks and were given more demerits for failure to meet military standards (e.g., inspections), but they received higher locker and infantry inspection scores by the end of the training cycle.
- Women had more excused absences for medical problems than men.

Data from recruit records were in partial agreement with the RTC staff's perceptions of recruit performance. Female companies' poor performance in the first academic period and superior performance in locker inspections agree with the staff's perceptions that female recruits were not familiar with Navy terminology but were strong in attention to detail. However, the staff's perception of females' superior military appearance was not supported by the personnel inspection scores.

LEADERSHIP OF RECRUITS

Observations made during interviews and visits to fleet and shore activities concerning the leadership of Navy enlisted women were helpful in identifying supervisory problems related to women in recruit training. Six supervisory problem areas were identified. These are summarized below.

1. Officers and petty officers at follow-on training sites and, in particular, operational units ashore and in the fleet, are reluctant to correct opposite sex subordinates. They tend to require higher levels of performance from same sex subordinates and are consequently less demanding of opposite sex subordinates.

2. These supervisors also experience difficulty in both performance counseling and personal counseling of opposite sex subordinates.

3. Male officers and petty officers lack specific knowledge about women's uniform and grooming standards.

4. Male supervisors often can not answer routine questions concerning common problems, medical services, and treatment available to women and are not alert to potential medical problems that might affect the performance of their female subordinates.

5. Male officers and petty officers often use their female counterparts as a "crutch" for dealing with female subordinates' uniform and appearance problems, discipline, shortcomings, and personal problems.

6. In the working environment, male officers and petty officers tend to call enlisted women by their first name but use the formal military title or last name with enlisted men.

On the basis of these findings, selected aspects of leadership practices in recruit training were analyzed for their possible impact on the military performance of female recruits.

RTC STAFF INTERVIEWS. The RTC staff members (Division Officers, LCPOs, Military Inspectors, and instructors) who were interviewed with the Military Performance Checklist about recruit performance were also questioned about their own job performance and that of the rest of the staff at RTC Orlando. They were asked whether recruit training standards were the same for male and female recruits and whether the standards were enforced in the same way for both sexes.

The majority of respondents emphasized that recruit training standards were the same for both sexes, but that there were subtle differences in enforcement and interpretation of those standards by the RTC staff. Eight respondents stated that they were "harder" on recruits of the same sex as themselves, and/or that they saw this trait in other staff members.

Male officers and Chief Petty Officers (CPOs) admitted they used loud, strong language only with male recruits. They tended to ignore female recruits and were less likely to make on-the-spot corrections until they felt more comfortable around them. One respondent admitted he smiled more when he addressed female recruits.

On the other hand, female officers and CPOs judged that they had higher standards for female recruits than the male officers and CPOs had for the male recruits. The female staff judged that they demanded a higher level of performance from the female recruit.

Staff members of both sexes also saw this pattern among the CCs. They thought female CCs demanded more of the female recruit than male CCs demanded of the male recruit. (One female staff member had visited male divisions and got the impression that standards were different; e.g., female barracks were cleaner.)

When the respondents were questioned about the problems they encountered in their jobs, the problems were found to be cross-sex. Male staff members admitted to one or more of the following:

- . They did not thoroughly know female regulations such as correct wear and care of the female uniform.
- . They felt uncomfortable when they did female recruit inspections.
- . They lacked knowledge about issues which arose when they counseled female recruits.
- . They tended to be less harsh with female recruits when disciplining them (e.g., treated female cases before the Navy Aptitude Board as trivial).

Although the frequency was small, some problems encountered by female staff members were also identified. Female RTC staff members admitted they felt they had to prove themselves, or that they had to strongly exert their authority from the beginning with male recruits. They also had problems with counseling male recruits.

STAFF TRAINING. The self-evaluations of RTC staff concerning their leadership styles were in agreement with observations of the leadership practices of supervisors and staff in the fleet. Given that there are recognizable problems in cross-sex supervision throughout the Navy, it would be expected that a formal orientation program would exist for staff newly arrived at RTC. However, no such program exists. In the interviews, male RTC staff reported that the only orientation they received when assigned to the RTC Orlando that concerned female recruit training was NAVCRUITRACOMORLINST 5370.26 which is an RTC Orlando instruction on standards of conduct, including fraternization. The policy of fraternization between male officers and Petty Officers (POs) and female recruits was stressed considerably during the men's informal orientation, while most other issues concerning female recruit training were almost totally ignored.

To compound the problem of the lack of formal orientation/indoctrination at the RTC, some new officers are experiencing exposure to recruit training for the first time. These officers are usually unfamiliar with the mission of recruit training, of major recruit training

evolutions, and of techniques which increase leadership and organizational effectiveness.

The current Company Commander School also does not address the unique problems of cross-sex leadership at the RTC Orlando. For instance, CCs receive inspection training only for their own sex recruits.

COMPANY COMMANDERS. The RTC staff frequently mentioned in the interviews that the CCs were role models for recruits and were responsible in large part for their training. They commented that male CCs used more Navy terminology, talked more about ship structure and organization, and gave less emphasis to cleanliness and attention to detail than the female CCs. Three male respondents remarked that more male CCs came from ships which gave them a perspective different from that of most female CCs. One conjectured that many female CCs came from office jobs where neatness and attention to detail were required behaviors.

Furthermore, the "hardcard" analyses indicated that female CCs gave out twice as many demerits to recruits for failing inspections and more often set back recruits in training for failure to meet military standards than did male CCs. (See tables 8 and 9.) These data suggest female CCs are emphasizing attention to detail more than male CCs.

The staff's analysis of CCs derived from the interviews is in agreement with data on the experience differences of male and female CCs presented in table 12 (Hughes, et al., 1983). The table describes characteristics of male and female company commanders (CCs) at the RTC Orlando in 1981.

Male and female CCs differed in almost every category. These differences showed the male CC to be an older, more experienced sailor. Over half (57 percent) of the male CCs were CPOs, compared to 8.5 percent of the female CCs. More than 70 percent of the males were over 30 years old, while only 26.3 percent of the females were beyond that age. A clear majority of the females had 8 years or less in service (69.8 percent) and had no sea duty (73.6 percent). Most of the males (79.6 percent) had 8 years or more in service and had at least 3 years sea duty (98.8 percent). With his greater Navy experience, the male CC probably has a greater career commitment and has a more solid identification with the Navy than does the female CC.

Both gender groups had been at the RTC Orlando about the same amount of time and had lead close to the same number of companies. However, the females began their duties as CC with less previous supervisory experience. Over half (62.4 percent) had supervised six persons or fewer, while over half the males (59.3 percent) had supervised 21 or more persons.

A majority of the female CCs (65.1 percent) came from one rating group--Administration--while the male CCs were distributed fairly evenly throughout all ratings.

TABLE 12. DESCRIPTION OF MALE AND FEMALE COMPANY COMMANDERS
AT RECRUIT TRAINING COMMAND, ORLANDO

| Characteristic | Relative Frequencies (%) | |
|---------------------|--------------------------|-------------------|
| | Male (n=172) | Female (n=106) |
| <u>Rate</u> | | |
| P02 | 11.0 | 44.3 |
| P01 | 31.4 | 45.3 |
| CPO | 32.6 | 8.5 |
| SCPO | 17.4 | 0.0 |
| MCPO | 7.0 | 0.0 |
| Missing/Unknown | <u>0.6</u> | <u>1.9</u> |
| Total | 100.0% | 100.0% |
| <u>Rating Group</u> | | |
| Deck | 18.6 | 2.8 |
| Ordnance | 8.7 | 1.9 |
| Electronics | 0.6 | 1.9 |
| Administration | 9.9 | 65.1 |
| Engineering | 30.8 | 2.0 |
| Construction | 3.5 | 0.0 |
| Aviation | 16.9 | 13.2 |
| Missing/Unknown | <u>11.0</u> | <u>12.3</u> |
| Total | 100.0% | 100.0% |
| <u>Age</u> | | |
| 25 or younger | 9.3 | 22.6 |
| 26-30 | 20.4 | 48.1 |
| 31-35 | 27.3 | 18.9 |
| 36-40 | 31.4 | 7.5 |
| 41 or older | <u>11.6</u> | <u>2.8</u> |
| Total | 100.0% | 100.0% |

Source: Hughes, et al., 1983.

TABLE 12. DESCRIPTION OF MALE AND FEMALE COMPANY COMMANDERS
AT RECRUIT TRAINING COMMAND ORLANDO (continued)

| Characteristic | Relative Frequencies (%) | |
|-------------------------|--------------------------|-------------------|
| | Male (n=172) | Female (n=106) |
| <u>Years Sea Duty</u> | | |
| 0 | 0.6 | 73.6 |
| 1-2 | 0.6 | 14.2 |
| 3-4 | 15.7 | 10.4 |
| 5-6 | 18.0 | 0.9 |
| 7-8 | 15.7 | 0.0 |
| 9-10 | 17.4 | 0.0 |
| 11-12 | 11.6 | 0.0 |
| 13-14 | 14.0 | 0.0 |
| 15 or more | 6.4 | 0.0 |
| Missing/Unknown | 0.0 | 0.9 |
| Total | 100.0% | 100.0% |
| <u>Years in Service</u> | | |
| 4 or less | 0.6 | 3.8 |
| 5-8 | 19.8 | 67.0 |
| 9-12 | 18.0 | 16.0 |
| 13-16 | 17.5 | 5.7 |
| 17-20 | 26.7 | 6.6 |
| 21 or more | 17.4 | 0.9 |
| Total | 100.0% | 100.0% |

TABLE 12. DESCRIPTION OF MALE AND FEMALE COMPANY COMMANDERS
AT RECRUIT TRAINING COMMAND ORLANDO (continued)

| Characteristic | Relative Frequencies (%) | |
|--|--------------------------|-------------------|
| | Male (n=172) | Female (n=106) |
| <u>Months at RTC Orlando</u> | | |
| 4 or less | 7.6 | 5.7 |
| 7-12 | 9.9 | 17.0 |
| 13-18 | 18.6 | 33.0 |
| 19-24 | 30.2 | 25.4 |
| 25-30 | 9.3 | 6.6 |
| 31-36 | 16.9 | 8.5 |
| 37-42 | 2.9 | 1.9 |
| 43-48 | 2.3 | 0.0 |
| 49 or more | 2.3 | 1.9 |
| Total | 100.0% | 100.0% |
| <u>Highest Number of Persons Previously Supervised</u> | | |
| 0 | 1.7 | 14.2 |
| 1-2 | 0.0 | 7.5 |
| 3-6 | 7.6 | 40.7 |
| 7-10 | 9.9 | 13.2 |
| 11-15 | 12.8 | 7.5 |
| 16-20 | 8.7 | 7.5 |
| 21-30 | 15.7 | 5.7 |
| 31-50 | 18.6 | 0.9 |
| 51 or more | 25.0 | 2.8 |
| Total | 100.0% | 100.0% |
| <u>Number of Companies Lead</u> | | |
| 0 | 1.2 | 0.0 |
| 1-2 | 7.6 | 12.3 |
| 3-4 | 40.1 | 58.5 |
| 5-6 | 32.6 | 19.8 |
| 7-8 | 8.1 | 5.7 |
| 9-10 | 8.7 | 0.9 |
| 11 or more | 1.7 | 2.8 |
| Total | 100.0% | 100.0% |

TABLE 12. DESCRIPTION OF MALE AND FEMALE COMPANY COMMANDERS.
AT RECRUIT TRAINING COMMAND ORLANDO (continued)

| Characteristic | Relative Frequencies (%) | |
|------------------------------|--------------------------|-------------------|
| | Male (n=172) | Female (n=105) |
| <u>Family Status</u> | | |
| Married, living w/family | 76.7 | 30.2 |
| Married, not living w/family | 9.3 | 8.5 |
| Single, not living w/dep. | 12.8 | 50.9 |
| Single, living w/dependents | <u>1.2</u> | <u>10.4</u> |
| Total | 100.0% | 100.0% |
| <u>Number of Children</u> | | |
| 0 | 19.7 | 66.0 |
| 1 | 15.7 | 21.7 |
| 2 | 34.9 | 10.4 |
| 3 | 16.3 | 1.9 |
| 4 | 9.9 | 0.0 |
| 5 or more | <u>3.5</u> | <u>0.0</u> |
| Total | 100.0% | 100.0% |
| <u>Level of Education</u> | | |
| Less Than High School | 7.5 | 0.0 |
| High School Diploma | 57.0 | 41.5 |
| Some College | 31.4 | 49.1 |
| Associate Degree | 2.9 | 9.4 |
| Bachelor Degree | 0.0 | 0.0 |
| Some Graduate School | <u>1.2</u> | <u>0.0</u> |
| Total | 100.0% | 100.0% |
| <u>LMET Course*</u> | | |
| Yes | 21.5 | 20.7 |
| No | 72.1 | 77.4 |
| Missing/Unknown | <u>6.4</u> | <u>1.9</u> |
| Total | 100.0% | 100.0% |

*Leadership Management Education and Training Course.

Given these pronounced differences in supervisory potential and experience, 77.4 percent of the female CCs had never taken the Leadership Management Education and Training (LMET) Course.

A number of other characteristics distinguished male and female CCs which may directly relate to their ability to counsel recruits about personal matters. Most of the males (86 percent) were married and had one or more children (80.3 percent), while only 38.7 percent of the females were married and only 34 percent had one or more children. The female CCs had more formal education than the males. Over half (58.5 percent) of the females had some college credits, compared to only 35.5 percent of the males. The typical role model for the female recruit is a young, single, educated woman with no family responsibilities, probably not adept at counseling her recruits about pregnancy and child care concerns.

The Hughes, et al. (1983) study further elaborated on leadership styles of male and female CCs by asking the CCs to comment on what criteria they used to evaluate their own leadership performance. Company commanders were asked to choose five important sources of feedback on their own performance from a list of sources. They did not rank the sources in order of importance. Table 13 lists the sources of feedback cited by CCs in the order of frequency of citation.

Both male and female CCs reported using the same five primary sources of feedback. Statistical t-tests reveal a few significant differences (at the $p = .01$ level) in the percentage of CCs of each sex who viewed a source as important. More female CCs than male CCs looked at the general attitude of the company for feedback. More male CCs than female CCs looked at feedback from other CCs and from academic test results. The Hughes, et al. (1983) finding that more male CCs emphasize academic test results may explain the project study's finding that male recruit companies win significantly more academic flags than the female recruit companies.

ONSITE OBSERVATIONS. Observation of daily activities at RTC Orlando revealed a number of instances where staff were not providing a good role model for recruits. For instance, at a graduation ceremony the following was noted:

- Some staff members participated in the official function and supported the graduation wearing dark glasses, while recruits were required to do without.
- Saluting by some staff members was not in accordance with regulations.
- Some female staff members were observed wearing bright nail polish and nonregulation earrings.
- Occasionally, staff members failed to salute during the national anthem and passing of colors.

TABLE 13. IMPORTANT SOURCES OF FEEDBACK ON THEIR OWN PERFORMANCE
CITED BY MALE AND FEMALE COMPANY COMMANDERS (CC)

| Source of Feedback | Frequency Cited | % Male CCs (n=172) Citing | % Female CCs (n=106) Citing |
|---|--------------------|---------------------------------|-----------------------------------|
| Company Morale | 246 | 87.2 | 90.6 |
| General Attitude of Company | 240 | 80.2 | 96.2* |
| Military Inspection Results | 211 | 75.0 | 77.4 |
| Company Appearance | 205 | 69.2 | 81.1 |
| Division Staff Feedback | 129 | 51.2 | 38.7 |
| Feedback from Other CCs | 102 | 43.0 | 26.4* |
| Flag Awards | 82 | 29.1 | 30.2 |
| Academic Test Results | 81 | 36.6 | 17.0* |
| Feedback from Partner | 35 | 10.5 | 16.1 |
| Verbal Reports from Individual Recruits | 30 | 9.9 | 12.3 |
| Verbal Reports from RCPOs | 18 | 4.7 | 9.4 |
| "Stand Tall" Inspections** | 5 | 1.7 | 1.9 |

Source: Hughes, et al., 1983.

*Significant difference, $p < .01$.

**No longer used.

Similar observations of poor role modeling were made on a number of other visits to the recruit training facilities.

RECRUIT TRAINING COMMAND/NAVAL ADMINISTRATIVE COMMAND PRACTICES

Management practices of the RTC and NAC which may contribute to a failure to adequately prepare female recruits for the reality of Navy life were observed.

STAFF GROOMING STANDARDS. Staff grooming standards at the RTC Orlando do not always reflect the quality necessary in a training environment. Personnel of the RTC staff and NAC support functions were observed with uniform and grooming violations that were uncorrected by supervisory personnel. Female staff members were observed with longer than regulation haircuts, hanging or wispy hair arrangements, and uniforms improperly fitted. Some NAC support personnel were observed wearing brightly colored nail polish, having fingernails so long they were unable to perform routine office tasks, and wearing cosmetics that were more appropriate for evening than a daytime working environment. Yet, male and female supervisors seemed unaware of these violations. Recruits build their initial concepts of military appearance and military bearing from the role models they observe; yet, little emphasis is given to the function of the staff and support personnel as role models.

WORK WEEK JOB ASSIGNMENTS. During the interviews at RTC Orlando, some staff members questioned whether or not sex discrimination occurred during the assignment of recruit jobs during Work Week. It was reported that female recruits are more often assigned to desk jobs or Quarterdeck watch where they will "look good" and be "on display." Women recruits, it was reported, are not assigned by NAC to the garbage detail or scullery in the galley. Female recruits are likely to be unprepared to take on the "dirty" jobs that are part of their Navy assignment.

RECRUIT UNIFORM AND GROOMING STANDARDS. Uniform and grooming standards contained in Navy Uniform Regulations (NAVPERS 15665D, 1981) as presently written are more ambiguous for women than men.

Male personnel are told more exactly what standards must be met to achieve the desired military appearance. The male sailor is not allowed a variable trouser length, is given guidelines on how his jumper is to fit, and knows exactly what are the grooming standards. He knows the exact allowable length of sideburns, top, and back hair. He knows the exact standard if he desires to maintain a beard or mustache. The guidelines allow men to present a military appearance that is standard throughout the Navy.

In contrast, women do not present a uniform military appearance because uniform and grooming standards for female personnel are ambiguous and open to individual interpretation allowing for more variability. Regulations are written to allow a 3-inch variability in the length of uniform skirts. No guidelines are given on the fit of the blouse or jacket. And while a few specific hairstyles are prohibited, the guidelines on hair are very general.

But even these levels of inexactness are better than the ambiguity of the standard (NAVPERS 15665D, 1981) covering cosmetic use. That standard states, "Cosmetics shall be conservative and in good taste," but neither "conservative" or "good taste" are defined. These are interpretative terms, open to highly subjective judgment and are too vague to be useful. The major emphasis of grooming and uniform standards seems to be fashion accommodation rather than support for a standard of military appearance. Consequently, female grooming and uniform standards in recruit training are ambiguous and instruction is limited.

Hair. RTC policies require newly enlisted recruits, both male and female, to have their hair cut during the first week of training. Navy regulations (NAVPERS 15665D, 1981) on female hairstyles state "when in uniform, the back of the hair may touch but not fall below the lower edges of the collar." Regulations do not prohibit long hair for women, but it must be pinned up to conform to the standard. In recruit training, however, long hair is not an option. For those women who opt for long hair after recruit training, there is no opportunity to practice pinning up their hair and no training on how to do it.

Female recruits are prohibited from using hair dryers, curling irons or other styling aids while at RTC. However, they may have their hair styled during Work Week if time is available.

Cosmetics. Female recruits at RTC Orlando are prohibited from using cosmetics except for special occasions which include the taking of individual and company pictures, visitation night, and controlled and uncontrolled liberty. On those occasions, the recruits are inspected by either the CC or the petty officer on watch duty and that person makes a personal judgment as to whether or not the recruit conforms to regulations. Recruits do not wear makeup during personnel inspection.

Female recruits receive limited instruction on wearing cosmetics and hairstyling.

Uniform Fit. Uniform issue and fitting procedures for recruits are not controlled by RTC but are supplied as a support function by NAC Orlando. Clothing is issued in two phases and three fittings occur. Recruit measurements which are used for all clothing issues are taken at the initial issue, even though it is very common for many recruits to trim up considerably, losing both pounds and inches as a result of the training program, balanced diets, and controlled eating habits.

The first issue and fitting is for the work uniforms, all-weather coats, jackets, and shoes. The problems females experience at this issue are related primarily to the service oxford and the steel-toed boots. When recruits would seek information or help on proper fit, the Issue Personnel were either unprepared or unable to assist them.

The second issue and fitting is for the service blues and whites. Recruits are required to try on each item of the uniform and each item is fitted before proceeding to the next item. The third fitting is done in the

recruit compartment. This is the final check of items issued. Each component is tried on individually and the entire company is checked, then the next item, and so on until all components have been final fitted. ~~Recruits stand throughout the process. They do not sit, bend or stretch to~~ check the fit nor do they put on a complete uniform, at any time. Tight fitting uniforms are acceptable. No recruit was observed to use the full-length mirror in the compartment to check the uniform fit or appearance.

Observation of instruction in the compartments showed that CCs often do not use good examples of proper uniform wear. The CC usually randomly selects a recruit and has her stand up while she explains proper uniform wear. The recruit is often wearing an improper uniform and so recruits are instructed to imagine what the correct uniform would look like. There are no pictures, posters, or examples other than RTC personnel for the recruit to use for guidance in learning correct uniform appearance.

Recruits wear the service dress uniforms on five occasions at RTC: controlled liberty, uncontrolled liberty, personnel inspection near the end of training, visitation night, and pass in review. These are the only occasions where recruits are permitted to practice the military appearance they are expected to present throughout their Navy career.

CLASSROOM INSTRUCTION/CURRICULUM

The Curriculum Outline for U.S. Navy Recruit Training (September 1983) is identical for male and female recruits except for portions of physical training. Women are required to run 2.25 miles in 23 minutes and men must finish the run in 18 minutes. The sit-reach requirement is -1.5 inches for male recruits and -0.5 inches for female recruits. Also, there is a male and female type of pushup. In depth examination of the recruit training curriculum and direct observation of the classroom instruction helped to identify several lesson topics devoted to military performance which needed improvement. Deficient instruction in these classes is related to some of the military performance problem areas of both men and women. The problem areas and the related lesson topics are presented below.

RATE/RANK RECOGNITION. The recruit is instructed on how to visually discriminate the various insignias, sleeve markings, collar and hat devices by color, design, and size. Yet, the teaching aids are limited to transparencies either drawn in black and white or those so faded that colors cannot be discriminated. Illustrations, in some cases, are not drawn to scale and often are almost impossible to read. It is almost impossible from the back of the classroom to tell an oak leaf from a silver star. The Chief Warrant Officer shoulder board and sleeve insignia are particularly difficult to distinguish. Most examples are of male uniform components; few female hats, etc., are used.

The two classes, Officer Rank Recognition (3.3) and Enlisted Rate Recognition (3.4), are scheduled back to back with large amounts of instructional data being dumped on the recruit. Recruits have no reference source with them such as the Basic Military Requirements (BMR) or

Bluejackets' Manual which would illustrate the material covered. The content in its present format is overwhelming to the students.

SHIP BOARDING PROCEDURES. The curriculum of recruit training is structured to transfer the newly enlisted recruit from the civilian to Navy environment. To give the recruit an accurate picture of Navy life, continuity must be maintained from classroom to classroom and there must be frequent reference to Navy situations in the course of teaching. Yet, this is not commonly done. Observations in the classroom reveal few applications of topics to the fleet or work group environments. The instructors tend to use many RTC examples, few of the Navy outside RTC. Instructors do not bridge learning; that is, associate what they are teaching to other topics taught so that learning is increased. This is well illustrated in the following example. Fleet supervisors reported that newly assigned sailors have a problem with proper ship boarding procedures. Several RTC learning topics address these procedures including Naval Customs and Courtesies (2.1), Ship and Aircraft Familiarization (2.2), Naval History and Tradition (2.4), Basic Deck Seamanship (2.11), and Hand Salute and Greeting (3.5). In each case, the information taught about quarterdeck procedures is a small segment of the total. The instructor teaches the lesson topic as written and does not associate by reference what is being taught with what has been previously taught. The recruit, lacking sufficient experience, is unlikely to associate the information, and a learning opportunity is diminished.

BIRTH CONTROL. This information is included in Lesson Topic 3.9, Personal Hygiene and Venereal Diseases. The lesson topic is structured to cover general health practices, hygiene practices necessary in communal living environments, venereal diseases, birth control, and cancer detection. Two training periods are allotted for this topic. Two-thirds of the instructional time is on venereal diseases, their causes, and preventive practices.

The subjects of birth control, abortion and sterilization are covered in approximately 10 minutes. The various methods are merely listed on a transparency. The instructor defines the methods and tells how they work. There is little comparison of methods and little information on the effectiveness or disadvantages of each. Recruits are not told that they may receive counseling and prescriptive contraceptive devices at Navy health facilities unless they ask. Nor are they told that some methods; e.g., birth control pills and IUDs, must be used for varying periods of time before they are effective. Personal problems associated with single parent and/or unplanned pregnancies early in the Navy career are not addressed.

The lesson topic is presented in the fourth week of training which may not allow the female recruit enough time to establish herself on "the pill" (if she chooses to do so) before graduation.

SUMMARY

From the comparisons of male and female recruit training at the RTC Orlando discussed in this section, the following findings are listed:

- . The Navy recruit training curriculum is identical for men and women.
- . The RTC Orlando officially requires the same level of performance of male and female recruits and uses identical standards for each.
- . Many staff members begin their duties at the RTC Orlando unprepared for leading opposite-sex recruits.
 - .. The RTC does not have a formal training program for new officers which addresses cross-sex training and leadership.
 - .. The Company Commander School lacks instruction in the training of opposite sex recruits.
- . Differences in the backgrounds of male and female CCs result in different role models for the recruits.
 - .. Male CCs are likely to have been in the Navy longer and have more sea experience.
 - .. Most female CCs come from a limited number of ratings in the Administration rating group and have less leadership experience.
- . Recruits have extensive contact with their CC and less with officers. There is little interaction with officers and petty officers of the opposite sex.
- . Demerits and rewards given to recruits reflect recruit performance as well as what CCs emphasize in training.
 - .. Female recruits receive twice as many demerits as male recruits for failing inspections, and female companies tend to have better inspection scores.
 - .. More male recruits receive setbacks in training for academic problems, and more male companies receive academic flags for the first academic period.
- . Performance feedback from schools and the fleet along with observations of recruit training suggest poor instruction of both male and female recruits in several areas.
 - .. Female recruits receive insufficient training in the compartments in grooming and wearing of the uniform.
 - .. Both male and female recruits receive insufficient instruction in hand saluting and greeting, officer rank and enlisted rate recognition, birth control, and shipboard orientation.

SECTION V

RECOMMENDATIONS

The RTC Orlando is making a sincere effort to graduate male and female recruits with the same set of military performance skills by providing the same training to each sex. Subtle variations in training practices leading to different performance outcomes for men and women emerge most often when personal leadership characteristics of male and female members of the RTC staff are a significant factor.

As women become more fully integrated into the Navy and as career opportunities for women are expanded, women will assume more nontraditional roles and their military experiences will be more in line with men's. Then leadership differences at the RTC based on sex will likely be decreased. In the meantime, however, the RTC must take special steps to minimize those differences through conscientious monitoring of training practices and careful training and direction of the RTC staff.

In an effort to create a Navy environment where women and men act as Navy team members working toward common goals, the following changes in recruit training are suggested. (Other recommendations are suggested for the general improvement of military performance of all recruits.)

Begin training program for Division Officers at RTC Orlando to include the following topics as they apply to both men and women recruits:

- .. uniform regulations
 - .. personal hygiene and grooming standards
 - .. physiology and fitness for duty
 - .. basic military subjects and Navy terminology
 - .. inspection training
 - .. administration of disciplinary practices
 - .. officer's personal experience of major recruit training evolutions
 - .. EEO Workshop on Women in the Navy
 - .. stress, counseling, and professional standards of behavior.
- Expand use of mixed gender leadership of companies and divisions.
- .. utilize opposite gender CCs for infantry drill practice and other drill deck evaluations as much as possible.

Include the following topics in the CC school curriculum as they apply to both sexes:

~~.. CC as role model for the recruit~~

.. basic military subjects and Navy terminology

.. inspection training for both male and female recruits for CCs of both sexes

.. extra leadership training for CCs if necessary.

Standardize and increase time spent on compartment instruction on wearing of dress uniform for female recruits.

.. provide more full length mirrors and more practice time wearing the dress uniform

.. provide good examples of the proper wearing of the dress uniform through such means as large posters;

.. train female recruits to salute wearing the combination cap

.. provide practice wearing both the in-season and out-of-season uniforms (also applies to male recruits).

Review Work Week job assignments to men and women recruits.

.. use duty roster concept for job assignments.

Maintain quality control of female uniform fitting procedures.

.. require RTC personnel to conduct more frequent observations of fitting procedures and give feedback to appropriate personnel

.. use fitting standards, not recruit judgment of fit

.. require hair to be styled prior to fitting of combination cap

.. require complete ensemble to be worn during fitting to ensure complete fit and match of uniform items.

Provide instruction on hairstyling and wearing makeup for female recruits.

.. develop lesson topic guide on grooming for female recruits

.. require/train female recruits to use cosmetics and good grooming practices for all training evolutions for which it would not interfere or be disadvantageous

- .. make grooming, including use of cosmetics and hairstyling, a part of the personnel inspections

- .. eliminate haircut requirement for female recruits and provide training on how to wear long hair to conform to Navy regulations.

Revise instruction on birth control and other health-related information.

- .. revise the current Lesson Topic 3.9, Personal Hygiene and Venereal Diseases, to include more detailed information about birth control (see Thompson, 1983).
- .. request regular review of Lesson Topic 3.9 by the cognizant Navy medical authority (e.g., the Health Service Education and Training Command) to ensure that the latest health information and medical education resources are being utilized
- .. revise RTC policy so that female recruits may be informed that birth control devices or information are available free of charge from Navy medical facilities
- .. schedule lesson topic 3.9 by the end of the second week of training to provide female recruits with needed time to make and implement pregnancy prevention decisions prior to transfer to follow-on training sites.

Improve technical training in topics related to military performance--rank/rate recognition, hand salute and greeting, shipboard orientation.

- .. improve or replace with 35mm slides all transparencies and chalkboard drawings used in the classrooms
- .. utilize color wherever required on slides explaining uniform items for accurate recognition of devices and insignia
- .. maintain and properly display clothing items in the classroom for instruction in rank/rate recognition
- .. improve the continuity of classroom instruction by relating topics where appropriate
- .. use more examples of Navy life outside the RTC during classroom instruction.

REFERENCES

Copeland, D. R., Henry, J. M., and Mew, D. V. Navy Recruit Training Optimization, Post-1980: Training System Design and a Plan for Implementation. TAEG Report No. 67, December 1978. Training Analysis and Evaluation Group, Orlando, FL 32813.

Copeland, D. R., Henry, J. M., Mew, D. V., and Cordell, C. C. Navy Recruit Training Optimization, Phase I: Current Assessment and Concept for the Future. TAEG Report No. 34, May 1976. Training Analysis and Evaluation Group, Orlando, FL 32813.

Durning, K. P. How Enlisted Women and Men View the Navy Organization. TR 82-83, January 1982. Navy Personnel Research and Development Center, San Diego, CA 92152.

Greebler, C. S., Thomas, P. J., and Duczynski, J. D. Men and Women in Ships: Preconceptions of the Crews. TR 82-57, January 1982. Navy Personnel Research and Development Center, San Diego, CA 92152.

Hoiberg, A. Women in the Navy: Performance, Health and Motherhood. NAVHLTHRSCHC Report No. 79-15, 1979. Naval Health Research Center, San Diego, CA.

Hughes, Jr., H., Copeland, D. R., Ford, L. H., and Heidt, E. A. Leadership Management Education and Training (LMET) Course Requirements for Recruit Company Commanders and "A" School Instructors. Technical Report 154, December 1983. Training Analysis and Evaluation Group, Orlando, FL 32813.

Muckler, F. A. Forecasting New Navy Task Requirements: Male-Female Performance. Prepared for the Combined Meeting of the Joint Medical Research Conference (JMRC) and the Training and Personnel Technology Conference (TPTC), 24 May 1977.

NAVPERS 15560, Naval Military Personnel Manual. 1983. Department of the Navy.

NAVPERS 15665D, Uniform Regulations. 4 April 1981. Department of the Navy.

Olson, M. S. and Stumpf, S. S. Pregnancy in the Navy: Impact on Absenteeism, Attrition, and Workgroup Morale. TR 78-35, September 1978. Navy Personnel Research and Development Center, San Diego, CA 92152.

Sadler, G. C. "Women in the Sea Services: 1972-1982." Proceedings, U.S. Naval Institute, 1983. Annapolis, MD 21402.

Thomas, P. J. Utilization of Enlisted Women in the Military. TN 76-7, 1976. Navy Personnel Research and Development Center, San Diego, CA 92152.

Thomas, P. J. Why Women Enlist: The Navy as an Occupational Choice, TR 77-20, March 1977. Navy Personnel Research and Development Center, San Diego, CA 92152.

~~Thomas, P. J. Women in the Military: Gender Integration at Sea. TN-81-13, May 1981. Navy Personnel Research and Development Center, San Diego, CA 92152.~~

Thomas, P. J., Monda, M. J., Mills, S. H., and Mathis, J. A. Navy Women in Traditional and Nontraditional Jobs: A Comparison of Satisfaction, Attrition, and Reenlistment. TR 82-50, July 1982. Navy Personnel Research and Development Center, San Diego, CA 92152.

Thompson, J. Proposed Image and Health Topics, Additions to the Navy Recruit Training Curriculum. Technical Note 9-83, December 1983. Training Analysis and Evaluation Group, Orlando, FL 32813.

APPENDIX A

ACTIVITIES AND COMMANDS REPORTING ON THE
MILITARY PERFORMANCE OF ENLISTED NAVY WOMEN

LOCATIONS OF ON-SITE INTERVIEWS

| <u>COMMAND/ACTIVITY</u> | <u>NUMBER INTERVIEWED</u> |
|-----------------------------|-------------------------------|
| COMTRALANT NORFOLK VA | 4 |
| COMNAVBASE NORFOLK VA | 2 |
| NTC ORLANDO FL | 1 |
| NAVSTA NORFOLK VA | 7 |
| NATTC MILLINGTON TN | 10 |
| NAVTECHTRACEN MERIDIAN MS | 17 |
| PERSUPDET NAS NORFOLK VA | 4 |
| USS YELLOWSTONE (AD-41) | 12 |
| USS L.Y. SPEAR (AS-36) | 13 |
| FCTCLANT DAM NECK VA | 8 |
| NAS OCEANA VA | 10 |
| NAVPHIBASE LITTLE CREEK VA | 10 |
| SERVSCOLCOM ORLANDO FL | 10 |
| SERVSCOLCOM GREAT LAKES IL | 4 |
| FLEASWTRACENLANT NORFOLK VA | 6 |
| HS-1 NAS JACKSONVILLE FL | 8 |
| NAVREGMEDCEN ORLANDO FL | 1 |
| NAVCRUITRACOM ORLANDO FL | 6 |
| TOTAL | 133 |

ACQUIRED COMMAND REPORTS ON THE WOMEN AT SEA PROGRAM

Atlantic Fleet

USS VULCAN (AR-5)
USS YOSEMITE (AD-19)
USS YELLOWSTONE (AD-41)
USS EMORY S. LAND (AS-39)
USS L. Y. SPEAR (AS-36)
USS FRANK CABLE (AS-40)

Pacific Fleet

USS ACADIA (AD-42)
USS CAPE COD (AD-43)
USS AJAX (AR-6)

APPENDIX B
MILITARY PERFORMANCE CHECKLIST

MILITARY PERFORMANCE CHECKLIST

1. Use of chain of command (observes regulations and persons in authority)
2. Wear and care of uniform (in accordance with regulations)
3. Use of Navy customs (e.g., saluting, wearing cover)
4. Use of Navy terminology
5. Cooperation (with supervisors, peers, and subordinates)
6. Initiative (seeking of progressive responsibility and leadership positions)
7. Ability to manage personal affairs (includes personal relationships, financial affairs, drugs/alcohol)
8. Use of proper safety precautions
9. Proper grooming and personal hygiene
10. Understands ship's (or unit's) organization and structure
11. Respect for rights of shipmates and subordinates
12. Follows orders
13. Accepts full responsibility for his/her actions
14. Maintenance of physical fitness standards
15. Acts as a leader
16. Truthful
17. Pays attention to details
18. Uses proper form of address with senior officers
19. Pride in self, the Navy, and the nation
20. Adaptability in coping with hardships and sacrifices demanded by Navy, life
21. Continued effort to improve skills and knowledge to increase individual capability and contribution to the Navy
22. Willingness to put team needs above personal needs
23. Proper military bearing (hands in pockets, chewing gum, displaying of affection in public, foul language)

- 24. Appropriate display of emotions
- 25. Dependability
- 26. Ability to make a decision and follow through.

APPENDIX C

WOMEN IN THE NAVY LITERATURE REVIEW

WOMEN IN THE NAVY LITERATURE REVIEW

Since 1978, women in the Navy may be assigned to sea duty, on a sustained basis, aboard auxiliary and noncombatant ships. A provision of the law¹⁰ also allows women to serve temporary additional duty (TAD) on any surface ship or squadron not expected to be assigned a combat mission during the TAD period.

Entrance of women into previously all-male sea duty has opened up more previously all-male ratings to women. At the end of fiscal year (FY) 1981, nine percent of all Navy women were serving aboard ship and in FY 1982, 40 percent of all technical school seats reserved for female personnel were in nontraditional areas (Thomas, Monda, Mills, and Mathis, 1982).

To date, very few studies have directly examined the performance of Navy women. Instead, the research has focused on attitudes. The topics of female attitudes toward the Navy and male attitudes toward women in the Navy encompass most of the research. A number of studies have investigated these topics in the context of the integration of women on ships. This literature review examines the research findings.

ATTITUDES TOWARD NAVY

To discover why women enlist in the Navy, questionnaires were administered during 1975 to 1,000 women and men in recruit training (Thomas, 1977). The study showed that both sexes joined the Navy for the same reasons: to make something of their life, to acquire more education and training, and to travel and meet people. The popularly held belief that women join the military to escape from their families and home life was not supported by the data.

The sexes had some occupational values in common, but differed on others. Over 50 percent of the men thought it was essential or important that their job provide the opportunity to advance to a supervisory position and that it reward those who work harder than others. Over 50 percent of the women wanted a job that helps others and makes the world a better place. These values were, in part, based on perceived opportunities in the workplace. In 1975, the majority of women in the Navy were utilized in administrative/clerical ratings, and they had less opportunity for advancement because of restrictions on ship duty.

A majority of both sexes wanted a job that provides a cheerful, clean work environment, a feeling of doing something important, and open communication between supervisor and worker.

¹⁰USC Title 10, Section 6015, amended by Public Law 95-485, Section 808, October 20, 1978.

A majority of the men (83 percent) had first-hand information from a relative or friend in the Navy about what military life entails for a member of their sex, compared to only 33 percent of the women.

These same men and women were studied again in 1976 and 1979, using surveys and the Enlisted Survival Tracking File, to measure job satisfaction according to whether they were assigned to ratings traditional or nontraditional for females and according to gender mix of the work group (Thomas, Monda, Mills, and Mathis, 1982).

The study found that approximately equal proportions of women and men left the Navy prematurely, were advanced to petty officer, and migrated to another type of job during their first enlistment. However, women were less apt to reenlist for a second term than were men. Gender composition of the work group and traditionality of the occupation were not related to women's attrition, satisfaction, advancement or reenlistment.

Durning (1982) provided information on the perceptions of Navy organizational climate held by enlisted women and men. Enlistees from air-related units, training commands and shore units were surveyed in 1978.

Beyond E-4, women typically were less optimistic as they advanced in paygrade than were men. Women did not show the steady improvement in perception with promotion that men did until they reached the chief petty officer (CPO) level. Only .8 percent of the females in the sample were CPOs compared to 15.2 percent of the males.

Women were less positive than men about the adequacy of their supervisors and command climate. They were typically less optimistic than men about work group discipline and working with peers. They perceived less lower-level influence and were less confident that their command would make best use of their individual effectiveness to obtain its objectives, and they had less positive perceptions of equal opportunity in the Navy than men.

ACCEPTANCE OF WOMEN

Thomas (1976) presented preliminary data from a study investigating some of the problems that arise when women are assigned to formerly all-male work groups. Case histories from two air squadrons, an amphibious battalion, a harbor craft unit, and a submarine support facility revealed certain patterns.

When a command received its first nondesignated women, it assigned as many women as possible to traditional jobs; i.e., administrative office or galley. When these options were exhausted, women were integrated into male work groups.

Men in these groups typically responded in two ways: (1) they tried to attract the attention of the women by whistling, staring, or making sexist comments and (2) they assumed the women were incompetent.

Competition between men and women often developed. Methods developed by women to compensate for their limited physical strength were adopted by the men. However, at one command, competition was thwarted by unequal job assignments. Women did not stand watches after hours and were restricted from handling dangerous equipments, so men got the heavier work load. These practices produced resentment from both sexes.

Behavior of enlisted supervisory personnel differed. Some CPOs developed paternalistic attitudes, some treated men and women unequivocally equal, some thought females on the job were a temporary phenomenon and did not concern themselves with the special considerations of supervising females, others practiced good leadership with both sexes.

All commands experienced three definite problems: (1) sex-blind equality was generally acknowledged to be unrealistic because of the physiological differences between men and women and the legal restrictions on the utilization of women, (2) after-hour duty watches were not possible for women where no berthing areas were available, and (3) there were difficulties with disciplining women. Supervisors admitted that with unauthorized absences, they were more lenient with women than with men.

A more recent study was conducted in 1979, after the Federal Code was amended to permit the assignment of women to noncombatant ships (Greebler, Thomas, and Duczynski, 1982). Personnel assigned to ships having enlisted women in their crews were asked about their expectations before and after the women reported aboard. The women were better educated, less likely to be married, had fewer children, were more apt to volunteer for sea duty than were men at their paygrade. A greater proportion of nonrated women were still in their teens and had been in the Navy fewer years than nonrated men.

Although generally optimistic, women were concerned with profanity, having to prove themselves, and resentment from men. Female petty officers (POs) were more pessimistic than were the nonrated women regarding equal treatment and acceptance of women officers. The women were concerned about learning ship terminology and ship design, and general quarter drills, but thought they would learn quickly. They were least concerned with crowded quarters.

Almost one-third of the women (one-half of the POs) stated they had experienced sexual harassment while in the Navy. However, the women did not feel they would experience more sexual harassment aboard ship than they had in shore establishments.

Men had a variety of preconceptions regarding integration. The majority of men felt that integration would have a positive effect on crew morale and a negative impact on discipline and on relations between Navy men and spouses ashore. They also felt it would create jealousy and conflicts among the men. The greatest concern of the lower-ranking men was that women

would receive preferential treatment, particularly in job assignments, physically demanding work, and disciplinary actions.

The most egalitarian attitudes toward women and favorable expectations about integration came from men in the medical/dental and administration departments where women are traditionally found ashore. More traditional attitudes and opposition came from men in the aviation, weapons, and engineering departments where women have not worked and where the work is often physically strenuous. Although men in supply departments held traditional attitudes, they were optimistic toward integration.

The lower-ranking men, more than the commissioned officers and chief petty officers, were in favor of a mixed-gender crew.

A preliminary report (Thomas, 1981) containing post-integration survey results from one ship (8 percent women) discussed attitude changes and problems nine months after integration.

A majority of the nonrated men favored having men and women working together on their ship and judged the integration as successful. Petty officers were the least positive of any group about the success of integration.

The women were positive about working and interacting with the opposite sex. Less than one-third of the women were experiencing pressure to prove themselves from subordinates and superiors. However, a majority of women expressed problems with crowded quarters and loss of an allowance paid to those living ashore (BAQ).

PERFORMANCE OF WOMEN

One of the major issues involving the performance of women in the Navy concerns the impact of pregnancy. A thorough study of the impact of pregnancy on attrition, absenteeism, and work group morale was conducted by Olson and Stumpf in 1978. The Navy's pregnancy policy at that time gave Navy women who became pregnant the option to request a discharge, and the discharge was granted routinely.¹¹ The study found that about 10 percent of the women in their sample became pregnant during the term of their first enlistment and about half of these elected to be discharged.

Olson and Stumpf (1978) reported that the amount of lost time for the women in their sample (pregnancy leave included) was less than for men, largely because men had considerably more lost days due to unauthorized absences than women. Furthermore, attrition rates for women and men at the end of the first two years were equal. Pregnancy accounted for the greatest amount of female discharges (41 percent), and unsuitability for the highest

¹¹ The Navy's current pregnancy policy, implemented in 1982, does not routinely grant women discharge from the Navy on the basis of pregnancy alone. The impact of this policy in the Navy is not yet known.

percentage of male discharges (36 percent). Over two thirds of respondents to a questionnaire who had worked with a pregnant woman reported little or no impairment of group productivity. (Members of the group of respondents included members of an aviation squadron.)

Muckler (1977) reports that strength and stamina are considerably overrated as a critical requirement of most Navy jobs, and that forecasts for job design in the future suggest that strength and stamina will become increasingly unimportant. As an example, he has studied the FF 1052 class fleet frigate with 30 enlisted ratings in its crew. Of these 30, 22 of the ratings appeared to require no particular job changes for women to perform these tasks. In the remaining ratings, the problems were basically of two kinds: (1) lifting and carrying heavy objects were sometimes required and (2) the job often had to be performed in poor environmental conditions. However, it was often the case that mechanical aids were not used but were available for heavy lifting, and the adverse environmental conditions often exceeded tolerance levels for men as well as women.

Muckler suggests that team performance is a more essential aspect of modern Navy work. Attitudes toward women in the military and Navy women's attitudes toward the Navy organization are important variables affecting team performance. Most of the Navy-sponsored research to date suggests that attitudes of both sexes are favorable toward integration of women into the Navy and will not impede the Navy's operational readiness.

DISTRIBUTION LIST

Navy

ASD (MRA&L)
 DASD (Equal Opportunity and Safety Policy)
 OASN (M&RA)
 CNO (OP-115, OP-987H, OP-987, OP-11, OP-12, OP-13, OP-15, OP-01W)
 ONR (442 (3 copies), 270)
 CNM (MAT-0722)
 CNET (01, 00A, N-233 (Dr. Perry))
 CNAVRES (02)
 COMNAVAIRSYSCOM (03, 340F, 413E)
 CNTECHTRA (016, N-6, N-7)
 CNATRA (Library (2 copies))
 COMTRALANT (00)
 COMTRALANT
 COMTRALANT (Educational Advisor)
 COMTRAPAC (2 copies)
 CO NAVPERSRANDCEN (Library (3 copies))
 Superintendent NAVPGSCOL (2124, 32)
 Superintendent Naval Academy Annapolis (Chairman, Behavioral Science Dept.)
 CO NAVEDTRAPRODEVCE (Technical Library (2 copies), PDM)
 CO NAVEDTRASUPPCENLANT (N-3 (2 copies))
 CO NAVEDTRASUPPCENPAC (2 copies)
 CO NAVAEROMEDRSCHLAB (Chief Aviation Psych. Div.)
 CO FLECOMBATRACENPAC
 CO FLECOMBATRACENLANT
 CO NAMTRAGRU
 CO NAVTECHTRACEN Corry Station (101B, 3330, Cryptologic Training Department)
 CO NAVTRAEEQUIPCEN (TIC, N-001, N-002, N-09)
 Center for Naval Analyses
 OIC NODAC (2)
 CO TRITRAFAC (2 copies)
 CO NAVSUBTRACENPAC (2 copies)
 CO FLEASWTRACENPAC
 CO FLEASWTRACENLANT
 CO NAVSUBSCOL NLON (Code 0110)
 CO NAVTECHTRACEN Treasure Island (Technical Library)
 DIR NAVEDTRAPRODEVCEDET Memphis
 CO NAVTECHTRACEN Meridian
 COMFLETRAGRU Pearl Harbor
 DIR NAVEDTRAPRODEVCEDET Meridian
 CNET Liaison Officer, Williams Air Force Base
 DIR NAVEDTRAPRODEVCEDET GLAKES
 CO SERVSCOLCOM GLAKES
 CO SERVSCOLCOM San Diego
 CO SERVSCOLCOM Orlando
 CO NAVCRUITRACOM Orlando
 CO NAVCRUITRACOM San Diego
 CO NAVCRUITRACOM GLAKES
 COMNTC Orlando
 COMNTC San Diego

DISTRIBUTION LIST (continued)

Navy (continued)

COMNTC GLAKES
 CO NAVAEROSPMEDINST (Code 13, Code 11)
 CO FLETRACEN, Mayport
 CO FLETRACEN, San Diego
 CO FLETRACEN, Norfolk
 CO FLEMINWARTRACEN
 CO NAVAVSCOLCOM (0212)
 CO HSL-31 (Training Dept.)
 Shipyard Training Support Center, Atlantic (1400)
 OIC NAVSPSERVADMINACT (Head, Training Support Unit)

Air Force

Headquarters, Air Training Command (XPTD, XPTI) Randolph Air Force Base
 Air Force Human Resources Laboratory, Brooks Air Force Base (2 copies)
 Air Force Office of Scientific Research/NL
 Headquarters Tactical Air Command (DOOS), Langley Air Force Base
 AFMTC/XR, Lackland Air Force Base
 4235 Strategic Training Squadron, Carswell Air Force Base
 Commander, Basic Military Training School, Lackland Air Force Base

Army

Commandant, TRADOC (Technical Library, ATTG-I)
 ARI (Technical Director, PERI-SM, PERI-IC, Library (2 copies))
 ARI Field Unit - Fort Leavenworth
 ARI (Reference Service)
 ARI Field Unit - Fort Knox (PERI-IK)
 COM USA Armament Materiel Readiness Command (DRSAR-MAS)
 COMDT, USAIPRM (ATSG-DT-R)
 CG USA Training Center and Fort Jackson, SC

Coast Guard

Commandant, Coast Guard Headquarters (G-P-1/2/42, GRT/54)
 Commanding Officer, Coast Guard Training Center, Cape May, NJ

Marine Corps

CMC (OT)
 CGMCDEC
 Director, Marine Corps Institute
 CO MARCORCOMMELECSOL
 CG MCRD Parris Island

DISTRIBUTION LIST (continued)

Other

Military Assistant for Human Resources, OUSDR&E, Pentagon
Institute for Defense Analyses

Information Exchanges

DTIC (12 copies)

DLSIE

Executive Editor, Psychological Abstracts, American Psychological Association
ERIC Processing and Reference Facility, Bethesda, MD (2 copies)